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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of the claims and listing of the claims in the application:

1.-15. (Cancelled)

16. (Currently Amended)

A tetracycline compound of formula (III):

wherein:

J⁵ and J⁶ are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, sulfonyl, acyl, alkoxycarbonyl, alkaminocarbonyl, alkaminothiocarbonyl, substituted thiocarbonyl, substituted carbonyl, alkoxythiocarbonyl, or linked to form a ring;

J⁷ and J⁸ are each alkyl, halogen, or hydrogen;

X is CR⁶'R⁶:

R², R², R⁴, and R⁴ are each independently hydrogen, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R⁴ is NR⁴'R⁴", alkyl, alkenyl, alkynyl, aryl, hydroxyl, halogen, or hydrogen;

R³, R¹⁰, R¹¹ and R¹² are each hydrogen or a pro-drug moiety;

R⁵ is hydroxyl, hydrogen, thiol, alkanoyl, aroyl, alkaroyl, aryl, heteroaromatic, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, alkyl carbonyloxy, or aryl carbonyloxy;

R⁶ and R⁶ are each independently hydrogen, methylene, absent, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R⁷ is hydrogen, ethyl, phenyl, 4-t-butylphenyl, t-butylaminophenyl or dimethylamino; , nitro, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, arylalkyl, amino, arylalkenyl, arylalkynyl, thionitroso, or (CH₂)₀₋₃NR^{7e}C(-W')WR^{7e}; W is CR^{7d}R^{7e}, S, NR^{7b} or O: -W' is O. S. or NR^{7f}: R⁷⁶, R⁷⁶, R⁷⁶, and R⁷⁶ are each independently hydrogen, acyl. alkyl. alkenyl. alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety; R⁸ is hydrogen, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl; R¹³ is hydrogen, hydroxyl, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl; and pharmaceutically acceptable salts thereof. The tetracycline compound of claim 16, wherein R⁴ is NR⁴'R⁴", X is CR⁶R⁶'; 17. R^2 , R^2 ', R^6 , R^6 ', R^8 , R^{10} , R^{11} , and R^{12} are each hydrogen; $R^{4'}$ and $R^{4''}$ are lower alkyl; and R^5 is hydroxyl or hydrogen. The tetracycline compound of claim 17, wherein R⁴ and R⁴ are each methyl 18. (Original) and R⁵ is hydrogen.

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- 19. (Original) The tetracycline compound of claim 16, wherein J⁷ and J⁸ are hydrogen.
- 20. (Original) The tetracycline compound of claim 16, wherein J⁵ is substituted or unsubstituted alkyl.
- 21. (Original) The tetracycline compound of claim 16, wherein J^5 is sulfonyl.
- 22. (Original) The tetracycline compound of claim 16, wherein J⁵ and J⁶ are linked to form a ring.
- 23. (Original) The tetracycline compound of claim 16, wherein J^5 is heteroaryl.

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24. (Original) The tetracycline compound of claim 16, wherein J⁵ is substituted carbonyl.

25. (Currently Amended) The tetracycline compound of claim 16, wherein said compound is selected from the group consisting of:

$$\begin{array}{c|c} R & & & \\$$

$$\begin{array}{c|c} R \\ N \\ N \\ N \\ OH \end{array} \begin{array}{c} OH \\ OH \\ OH \end{array} \begin{array}{c} OH \\ OH \\ OH \end{array} \begin{array}{c} OH \\ OH \\ OH \end{array}$$

$$\bigvee_{H_2C} \bigcap_{OH} \bigcap_{OH$$

$$\begin{array}{c|c} R & OH \\ \hline N & H_2C & OH \\ \hline OH & OH \\ \hline \end{array}$$

$$\begin{array}{c|c} & H & OH \\ \hline & N & \\ & N & \\ & N & \\ & OH & O & OH \\ \end{array} \begin{array}{c} OH & OH \\ \hline & OH & O \\ \hline & OH & O \\ \end{array}$$

$$\begin{array}{c|c} H & OH \\ N & H_2C \\ \hline OH & O & OH \\ \end{array}$$

$$H_{2}N_{H_{2}C} \longrightarrow \bigcap_{H} \bigcap_{H_{2}C} \bigcap_{H_{2}C}$$

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wherein

R is substituted or unsubstituted alkyl, alkenyl, alkynyl, halogen, alkoxy; and Y is N, O, or S, or pharmaceutically acceptable salts or prodrugs thereof.

26. (Previously Presented) A tetracycline compound selected from the following:

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OH \N

OH O

.OH

NH₂

10

HO. Н NH₂ OH O 0 AQ.

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15

ДH

ЮН

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or a pharmaceutically acceptable salt thereof.

- 27. **(Previously Presented)** A pharmaceutical composition comprising an effective amount of a tetracycline compound of any one of claims 16, 25 or 26, and a pharmaceutically acceptable carrier.
- 28. (Original) The pharmaceutical composition of claim 27, wherein said effective amount is effective to treat a tetracycline responsive state.

29.-42. (Cancelled)

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43. (Currently Amended) The compound of claim $42\underline{1}$, wherein \mathbb{R}^7 is dimethylamino.

44. (Previously Presented) The compound of claim 16 or 24, wherein J⁶ is alkyl.

45. (Currently Amended) The compound of claim 44, wherein said compound is